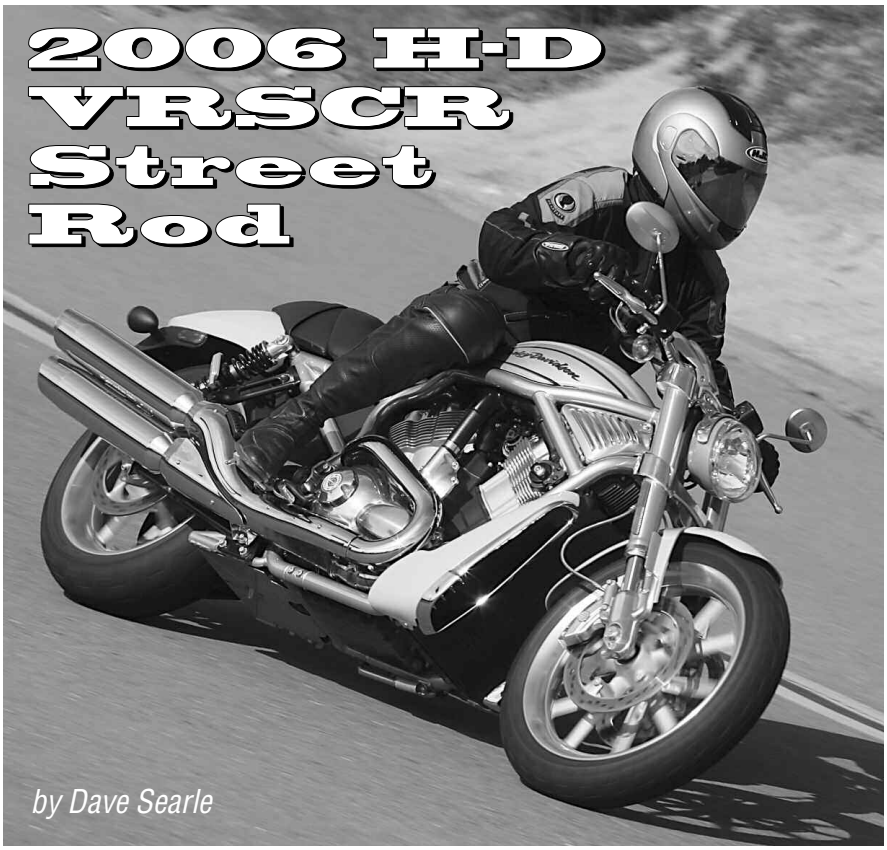
2006 H-D VRSCR Street Rod



by Dave Searle

HARLEY-DAVIDSON INTRO-DUCED the V-Rod in July of 2001. It was so different from anything the Motor Company had ever produced before, it was practically the anti-Harley. Gone was the air-cooled engine and styling that had become an American icon. There was no custom paint, all of the bodywork was unpainted aluminum. The engine was a 60° V-twin, DOHC, water-cooled, four-valve. Even the hardware was metric. Was nothing sacred? It was blasphemous, and brave. And a major investment. The V-Rod would be the first of a new family we were told. Skeptics to the core, we had to wonder if they'd shot themselves in the foot. The first ones off the line were snapped up by collectors, but before long, sales slowed and we never saw great numbers on the road, even at the Harley festival that is Daytona.

Sure it was different, that was precisely the point, they said. It was a bike built to take sales that would have gone to the Japanese or Europeans we were told. It was a huge hit overseas, they said. In fact, they say they built the 50,000th V-Rod on February 3rd of this year. Unbelievable!

Compounding our curiosity was the long wait for a second member of the family. The Revolution engine was a wonder, having been developed with the painstaking assistance of Porsche Design in Germany. It could have easily been the motive source for any sort of motorcycle, a design as versatile in its possible applications as BMW's evergreen boxer twin.

We'd been a bit disappointed by the motor's first packaging. Hoping to connect to the H-D faithful, the V-Rod aimed for a dragster look, its forks raked out at 36°, its wheelbase stretched out to 67.5", with Fatboy-like disc wheels on both ends.

But it was surely beautiful, setting new standards of finish and construction. The frame was mig-welded of hydro-formed tubing, which used steel dies and huge internal water pressure to force the tubing into tight sinuous curves that defied the dents and kinks of conventional bending. The exhaust system also benefitted from the technique, to create swelling forms worthy of a musical instrument.

Producing 115 hp at the crankshaft, it was easily the most powerful Harley in the line, and it did indeed make great haste in a straight line. But not everywhere shares Florida's lack of curves. On canyon roads the long wheelbase seemed to fill up the width of corner, the low-boy rear suspension gave insufficient travel, the disc wheels were steered by crosswinds and we secretly wished to see the motor appear in something more like a Buell or an upright sport-tourer next time. But, at first glance, the Street Rod looked so much like the V-Rod that it was hard to imagine it would be very different.

Were we wrong!

The New Chassis

Although the chassis still looks similar, the rake has been pulled in by 4°, from 34° to 30° while the forks continue the ploy of being angled 2° more than the steering head. Although you might imagine a much shorter wheelbase as a result, that isn't the case. To avoid interference between the front tire and the radiator, the neck of the frame had to be moved forward, so the wheelbase has decreased just 7/10" and is still very long at 66.8".

To allow a very sporty 40° lean angle (it's just 32° on the V-Rod), the bike was lifted on the suspension, raising the center of gravity and allowing room for much longer suspension travel, now 5.0" at both ends (vs. 3.94" front and 2.36" rear on the V-Rod). The foot pegs were pulled back 11.6" and lifted 1.75" higher. And to provide a seat height fully 5.0" taller, one that would work with the new peg position, the rear subframe was raised an additional 1.5" while a taller seat pan was used to gain additional leg room. Making good use of the new room under the seat, the gastank was made taller, increasing volume from four gallons to five.

While the V-Rod's rider slouched on pullback handlebars, the Street Rod's bars are flatter, 4.25" further forward and .9" lower, putting the torso into a mild forward lean instead. Altogether, it's a position that welcomes aggressive cornering and gives a rider a lot more feel for the front wheel.

Engine

The need to get the exhaust system well away from the pavement required new mufflers mounted higher. Called "straight shot" silencers, they don't have the V-Rod's curvaceous lines, but do have greater internal volume, their freer-breathing enabling the hp-output to go from 115 to 120 at the crank, they said.

More horsepower is always a good thing, but we couldn't find it. Not only did our dyno testing show a slight decrease of 1.0 hp in power peak, to 102.2, but the mid-range was softer still, as much as 8-hp less @ 6400 rpm, and peak torque was down from 72.0 lb./ft. to 68.4 lb./ft.

Concerned that the bike we obtained after the San Diego press introduction felt noticeably less powerful, we inquired about modifications that might have taken place after the press events. We were told that a few of the bikes in San Diego were pre-production prototypes and may have been different in some way from the production machines.

Not surprisingly, the results of our on-road performance testing backed up the dyno's findings, and the new machine was a touch slower, rather than faster. The pull off the line was the most obvi-